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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/082,459	02/25/2002	Ronald E. Sweatman	HES 2000-IP-001848	4431

7590 10/08/2004

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EXAMINER
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BOMAR, THOMAS S

ART UNIT	PAPER NUMBER
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3672

DATE MAILED: 10/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/082,459

Applicant(s)

SWEATMAN ET AL.

Examiner

Shane Bomar

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 26 August 2004.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1,3-13,15,16,18-20,22-30 and 32-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,3-10,24-30 and 32-37 is/are allowed.
- 6) ☒ Claim(s) 11-13,15,16 and 18-20 is/are rejected.
- 7) ☒ Claim(s) 22 and 23 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claims 11-13, 15, 16, and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over US patent 6,189,612 to Ward in view of US patent 5,913,364 to Sweatman, and further in view of US patent 6,356,205 to Salvo et al.

Regarding claim 11, Ward teaches a method of discovering, diagnosing and correcting formation integrity problems in successively drilled subterranean well bore intervals comprising the steps of: (a) drilling a first well bore interval; (b) determining if well bore fluid is being lost from each drilled well bore interval or if pressurized formation fluid is flowing into each well bore interval, or both; (c) determining the pressure containment integrity of each well bore interval; (d) drilling a second wellbore interval; and (e) repeating steps (b) and (c) for the second drilled well bore interval (see col. 9, line 60 through col. 11, line 5). Ward also teaches the further steps of (1) running well bore logs and collecting other relevant well bore data in said first well bore interval in real time, and (2) transmitting all real time data collected to a location (see col. 9, lines 50-59 of Ward). It is not taught that the method includes the steps of providing a specific pumpable sealing composition at said well site, and performing said specific treatment including pumping said sealing composition into said first drilled well bore interval to cause said first drilled well bore interval to be sealed or the pressure containment integrity to be increased, or both.

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Sweatman teaches a method of correcting formation integrity problems similar to that of Ward. Sweatman further teaches the method steps of providing a pumpable sealing composition for sealing said drilled well bore interval to prevent well bore fluid outflow therefrom, and performing said specific treatment including pumping said sealing composition into said first drilled well bore interval to cause said first drilled well bore interval to be sealed or the pressure containment integrity to be increased, or both (see claim 1 and col. 1, line 42 through col. 2, line 10). It would have been obvious to one of ordinary skill in the art, having the teachings of Ward and Sweatman before him at the time the invention was made, to modify the method taught by Ward to include the method of providing a pumpable sealing material and pumping the material downhole of Sweatman, in order to obtain an improved method of sealing a subterranean zone. One would have been motivated to make such a combination because a method that provides a sealing composition that rapidly converts into high viscosity sealing masses would have been obtained, as taught by Sweatman in col. 2, lines 37-47.

Therefore, the combination of Ward and Sweatman teaches all of the limitations of claim 11 except for the step of transmitting all real time data collected to a remote location where a specific treatment using a specific pumpable sealing composition is determined.

Salvo et al teach a method for transmitting all real time data collected from a well to a remote location where a specific treatment using the collected data is determined (see claim 25 and col. 1, line 66 through col. 2, line 8). It would have been obvious to one of ordinary skill in the art, having the teachings of the combination and Salvo et al before him at the time the invention was made, to modify the method of discovering, diagnosing and correcting formation integrity problems in successively drilled subterranean well bore intervals taught by the

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combination to include the step of transmitting all real time data collected from the well to a remote location where a specific treatment using the collected data is determined of Salvo et al, in order to obtain a remote monitoring, diagnostics, and reporting system that provides real-time data (see col. 1, lines 44-49 of Salvo et al. One would have been motivated to make such a combination since Salvo et al have shown it to be notoriously known in the well art to transmit real-time data to a remote location for this purpose.

Regarding claims 12 and 13, the combination applied to claim 11 teaches circulating a well bore fluid through said drilled well bore interval for a period of time sufficient to determine if the quantity of said well bore fluid being circulated decreases due to well bore fluid outflow from said drilled well bore interval or increases due to pressurized formation fluid inflow into said drilled well bore interval (see col. 8, lines 1-42 of Ward).

Regarding claims 15 and 16, the combination applied to claim 11 teaches increasing the density of or pressure exerted on a well bore fluid in said drilled well bore interval to an equivalent well bore fluid weight greater than or equal to the maximum hydrostatic pressure and friction pressure level to be exerted in said drilled well bore interval to determine if leak off occurs and the pressure containment integrity of said drilled well bore interval is inadequate (see col. 10, lines 20-43 of Ward).

Regarding claim 18, the combination applied to claim 11 teaches that the pumpable sealing composition has the properties of rapidly converting into high viscosity sealing masses upon commingling and reacting with well bore fluids which are diverted into, seal and strengthen weak zones and openings in the drilled well bore interval through which well bore fluid outflows

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or pressurized formation fluid inflows into said drilled well bore interval (see col. 1, line 59 through col. 2, line 3 of Sweatman).

Regarding claims 19 and 20, the combination applied to claim 11 teaches that the pumpable sealing composition reacts with water in said drilled well bore interval and is comprised of oil, a hydratable polymer, an organophillic clay and a water swellable clay, or reacts with oil in said drilled well bore interval and is comprised of water, an aqueous rubber latex, an organophillic clay, sodium carbonate and a hydratable polymer (see col. 4, lines 36-47 and col. 5, lines 13-25 of Sweatman).

#### ***Allowable Subject Matter***

3. Claims 1, 3-10, 24-30, and 32-37 are allowed.
4. Claims 22 and 23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Response to Arguments***

5. Applicant's arguments, see pages 11-16, filed 8/26/04, with respect to the rejection of claims 1-37 under 35 USC (102) and with respect to the rejection of claims 1-10, 22, 23, 25-30, 33, and 35-37 under 35 USC 103 have been fully considered and are persuasive. The rejection of these claims has been withdrawn.
6. Applicant's arguments with respect to claims 11-20 have been considered but are moot in view of the new ground(s) of rejection.

*Conclusion*

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

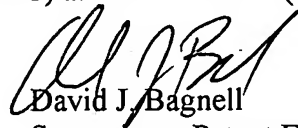
8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Streetman teaches another method for transmitting all real time data collected from a well to a remote location.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shane Bomar whose telephone number is 703-305-4849. The examiner can normally be reached on Monday - Thursday from 7:00am to 4:30pm. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bagnell can be reached on 703-308-2151. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



David J. Bagnell  
Supervisory Patent Examiner  
Art Unit 3672



tsb

October 1, 2004